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[54] **SPRITE CODING**

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[52] **U.S. Cl.** **382/236**; 382/232; 348/415

[58] **Field of Search** 382/232, 236; 395/135, 174; 345/121; 348/420, 415; 463/33

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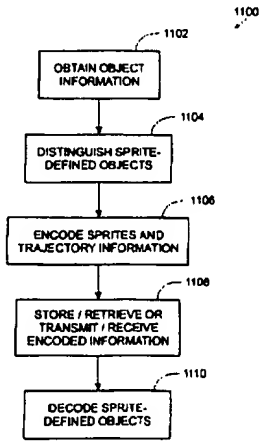
[57] **ABSTRACT**

Sprite-defined objects are completely defined throughout the video sequence as of their first appearance by a "sprite" and one or more trajectories. The sprite includes all the image characteristics of an object throughout the video sequence, and one or more trajectories warp or transform the sprite to represent the object in each frame of the video sequence. The sprite-defined object or objects are a subset of the general objects in the general video sequence and have available more information when they first appear in a video sequence than general objects. A simplified compression method allows the additional information available for sprite-defined objects to be utilized more efficiently than the additional information would be by encoder and decoder processes for general objects. As a result, processing the sprite-defined object or objects of the general video sequence in accordance with this simplified process can further improve bit rate requirements and efficiency for storing or transmitting the general video information.

22 Claims, 31 Drawing Sheets



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